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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/702,134	10/31/2000	Andrey A. Boukharov	04983.0201.00US00/38-21(5	8935

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ARNOLD & PORTER
IP DOCKETING DEPARTMENT; RM 1126(b)
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EXAMINER	
JOHANNSEN, DIANA B	
ART UNIT	PAPER NUMBER
1634	

DATE MAILED: 04/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/702,134	BOUKHAROV ET AL.	
	Examiner	Art Unit	
	Diana B. Johannsen	1634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *1* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 January 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-7* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

ELECTION/RESTRICTION

1. The response filed on January 31, 2003 has been entered. Upon further consideration, the Election/Restriction mailed July 2, 2002, paper no. 5, is withdrawn, and restriction/election is required as set forth below.

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-4, drawn to nucleic acid molecules, classified in at least, for example, class 536, subclass 23.1.

II. Claims 5-7, drawn to nucleic acid molecules , classified in at least, for example, class 536, subclass 23.6.

3. The inventions are distinct, each from the other because of the following reasons:

Inventions I-II are drawn to patentably distinct products. While Inventions I-II are each drawn to nucleic acid molecules, the molecules of Inventions I-II differ in both structural and functional properties. Regarding structure, Invention I is drawn to large genomic fragments comprising both coding and non-coding sequences and encoding multiple distinct proteins, while Invention II is drawn to is drawn to nucleic acid molecules encoding particular single proteins. Regarding function, the molecules of Invention I encode particular combinations of proteins (which combinations are characterized by the collective functions of the group of encoded proteins) and may be used in the preparation of such combinations of proteins and as, e.g., genomic probes and chromosomal paints, while the molecules of Invention II encode individual proteins characterized by particular functional activities and may be used in, e.g., methods of

detecting homologues of said proteins in other species. Accordingly, the molecules of Invention I are patentably distinct from the molecules of Invention II.

Election Requirement Applicable to Groups I-II

4. It is noted that each Group detailed above reads on numerous patentably distinct molecules. MPEP 803.04 states:

> Nucleotide sequences encoding different proteins are structurally distinct chemical compounds and are unrelated to one another. These sequences are thus deemed to normally constitute independent and distinct inventions within the meaning of 35 U.S.C. 121. Absent evidence to the contrary, each such nucleotide sequence is presumed to represent an independent and distinct invention, subject to a restriction requirement pursuant to 35 U.S.C. 121 and 37 CFR 1.141 *et seq*.

5. Regarding Invention I, the numerous SEQ ID NOS encompassed by the claims are patentably distinct by virtue of having different structures, which structures include different particular combinations of coding and non-coding sequences, and different combinations of proteins (or portions of proteins), each combination being characterized by a different particular set of functional properties. These molecules are deemed to normally constitute independent and distinct inventions within the meaning of 35 U.S.C. 121. The molecules are not obvious variants of one another, and a reference against one molecule would not be a reference against another. In view of this and the multitude of sequences submitted for examination by the USPTO, a search of more than one such molecule would pose a serious burden. Accordingly, a further restriction is applied to Group I. If Group I is elected, Applicant must further elect a single SEQ ID NO.

This is not an election of species. Applicant is advised that examination will be restricted to only the elected SEQ ID NO.

6. Regarding Invention II, the claims encompass numerous distinct nucleic acid molecules encoding different particular proteins, which molecules are patentably distinct by virtue of having different structures and encoding proteins with different structures and functions. As set forth above, these molecules are deemed to normally constitute independent and distinct inventions within the meaning of 35 U.S.C. 121. The various molecules are not obvious variants of one another, and a reference against one molecule would not be a reference against another. In view of this and the multitude of sequences submitted for examination by the USPTO, a search of molecules encoding more than one distinct protein would pose a serious burden. Accordingly, a further restriction is applied to Group II. If Group II is elected, Applicant must further elect a single molecule encoding one of the proteins of Table 1.

This is not an election of species. Applicant is advised that examination will be restricted to only the elected molecule.

7. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification and recognized divergent subject matter, and because Inventions I-II, as well as the numerous distinct SEQ ID Nos of Invention I and the numerous distinct nucleic acids encoding proteins of Invention II require different sequence and text searches that are not co-extensive, restriction of these distinct for inventions would pose a serious burden on the examiner, and therefore restriction for examination purposes as indicated is proper.

8. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

9. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diana B. Johannsen whose telephone number is 703/305-0761. The examiner can normally be reached on Monday-Friday, 7:30 am-4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, W. Gary Jones can be reached at 703/308-1152. The fax phone numbers for the organization where this application or proceeding is assigned are 703/872-9306 for regular communications and 703/872-9307 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703/308-0196.

Diana B. Johannsen
April 7, 2003